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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,181	08/21/2001	John D. Hatch	P1185	1611

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EXAMINER	
CHOW, CHIH CHING	

ART UNIT	PAPER NUMBER
2122	

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/935,181	HATCH ET AL.	
	Examiner	Art Unit	
	Chih-Ching Chow	2122	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 August 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *07/17/02*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the application filed on August 21, 2001.

2. The priority date considered for this application is August 21, 2000, which is the filing date of the provisional application no. 60/226,734.

3. Claims 1-20 have been examined.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Block **12** in Figure 1. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claim 17 is objected to because of the following informalities: Claim 17 item (f), "by the master script' should be 'by the master script file'. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. As per independent claim 10 recites: "the function manager further comprises at least one factory", where 'factory' is not clearly defined as to what are included and what are excluded. Examiner assumes that this paragraph means at least on of the components (block items) in Figure 3. Appropriate corrections are required.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 13, 15, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. 2002/0008703 by John Wickens Lamb Merrill et al. (hereinafter "Merrill").

CLAIM	Merrill
13. An apparatus for producing user interfaces and device functionality for processor-based devices having an embedded operating system and programming framework, comprising: (a) a scripting engine for executing a script file; (b) an input/output control for performing multiple actions on the device; (c) a first object control for providing control over a first object; (d) a second object control for providing control over a second object; (e) a keyboard control for providing control over keyboard events; and (f) a miscellaneous control for providing control functionality over various computer components.	For item (a) see Merrill, see paragraph 417, "Applications written in a prototyping language (scripts 502, 504) access the services via a **scripting engine** 506." For items (b)-(f), see Merrill's FIG. 1, it shows input/output control, keyboard control, and control for various computer components; FIG. 2, teaches at least two object controls.
15. The apparatus of claim 13, wherein the first object further comprises a browser window.	For the feature of claim 13 see claim 13 rejection. See Merrill FIG. 2 for browser window.
16. The apparatus of claim 13, wherein the second object further comprises a shell control for gaining access to internal shell functionality and to register as a shell on the devices.	For the feature of claim 13 see claim 13 rejection. See Merrill FIG. 2 shell controls a second object (browser window); and paragraph 33, "FIG. 2 is a screen shot illustrating an example of

animated character located on top of the user interface in a **windowing environment**... this example includes an Internet browser application running in **one window** 64 and a word processor application 66 running in a **second window** (*second object*) on the desktop of the Windows 95 Operating System." - the prior art teaches providing control function to at least two browser windows.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 1 -6, 9-12, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 2002/0008703 by John Wickens Lamb Merrill et al. (hereinafter "Merrill"), in view of US Patent No. 6,701,514 by John Jeffrey Haswell (hereinafter "Haswell").

CLAIM

1. An apparatus for producing user interfaces and device functionality for processor-based devices having an embedded operating system and programming framework, comprising:

(b) function means, coupled to said scripting means, for producing interface functions in accordance with the instructions for a user interface and device functionality received from the scripting means; and

(c) output means, coupled to the functions means, for displaying the user interface and applying device functionality on said processor-based device.

(a) scripting means for receiving and storing instructions for a user interface and device functionality on a processor based device;

Merrill / Haswell

In Merrill FIG. 1 teaches an **operating system** with **user interfaces**, and programming framework. For items (b) and (c), in Merrill, paragraph 354, "In the current implementation, the specific synchronization services are provided via three primitives: 'Wait', 'Interrupt', and 'Stop' These primitives are a special type of **function call**, which are **accessible from a script** or via the animation server API." And in Merrill's claim 4, "converting the request from a script **command** (*instruction*) to **function call** on an animation server; and in the animation server, processing the **function call**". Merrill teaches all aspects of claim 1, but he does not mention 'receiving and storing script data' specifically, however, Haswell teaches it in an analogous prior art. For item (a) see Haswell column 16, lines 7-9, "in operation 802, **script data is received** utilizing a **language-driven interface** (*user interface*)", also in Haswell's abstract, "the plurality of test **scripts** are **stored** in a centrally located database."

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to supplement Merrill's disclosure of the generating functions based on received script by storing and editing scripts via an user interface taught by Haswell for the purpose of customize a script for a

	specific purpose (Haswell column 3, lines 24-25).
2. An apparatus as recited in claim 1, wherein the scripting means includes: (a) a script writer for writing instruction for a user interface or device functionality; and (b) a script controller, coupled to the script writer, for producing objects in accordance with the instructions for a user interface or device functionality from the script writer.	For the feature of claim 1 see claim 1 rejection. For item (a), see Merrill's FIG. 12, **Animation Script** must be entered via a script writer, which writes instruction for a user interface or device functionality; for item (b) the **SCRIPTING ENGINE** in Merrill's FIG. 12 works as a **script controller**, which would control objects based on the received script, see Merrill's paragraph 417, "Applications written in a prototyping language (scripts 502, 504) **access the services via a scripting engine** 506." Also see claim 2, "The method of claim 1 wherein the request from the application is a **script command** and the application is a **script**." And in claim 4, "The method of claim 2 wherein the application specifies the identification of the action of the second animation using a request **object** that represents an animation request from the application directed to the second animation."
3. The apparatus of claim 1, wherein device functionality further comprises control of functionality of a first browser window by a second browser window.	For the feature of claim 1 see claim 1 rejection. In Merrill's paragraph 33, "FIG. 2 is a screen shot illustrating an example of animated character located on top of the user interface in a **windowing environment**... this example includes an Internet browser application running in **one window** 64 and a word

	processor application 66 running in a **second window** on the desktop of the Windows 95 Operating System." - the prior art teaches providing control function to at least two browser windows.
4. The apparatus of claim 2, wherein device functionality further comprises control of multiple browser windows at once.	For the feature of claim 2 see claim 2 rejection. See Merrill's paragraph 352, "In order to provide asynchronous animation, the animation server should: .... update the position or state of each animation independently, without reference to an explicit external or internal clock relative to which the events of all **simultaneously** displayed animations are **synchronized**."
5. The apparatus of claim 2, wherein device functionality further comprises transfer of Operational information to the script controller for further processing.	For the feature of claim 2 see claim 2 rejection. Merrill's FIG.1 teaches that the operational information is transferred to the script controller, it's further specified in paragraph 49, "in this implementation the regionizer also supports the loading of **bounding region information** in cases where it is precomputed and stored along with the frame data in the animation file."
6. The apparatus of claim 2, wherein device functionality further comprises control of a browser window from outside the window.	For the feature of claim 2 see claim 2 rejection. In Merrill, see both FIG. 1 and FIG. 2 show the control of a browser window can be from an outside window. Also see claim 3 rejection.
9. The apparatus of claim 2, wherein the	For the feature of claim 2 see claim 2

function means further comprises a configuration manager.

rejection. Merrill teaches all aspects of claim 1, but he does not mention 'configuration manager' specifically, however, Haswell teaches it in an analogous prior art. See Haswell, column 47, lines 65-66, "FIG. 21 illustrates a method 2100 for software **configuration management**. First, in operation 2102, software **configuration management units** *(configuration manager)* are identified. In operation 2104, software **configuration management** repositories and practices are established for storing work product related to the software **configuration management units**." And column 48, lines. 59-63, "The purpose of **Software Configuration Management** (SCM) 2106 is to establish and maintain the integrity of the **components** of an application throughout the project's life cycle."
It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to supplement Merrill's disclosure of the generating functions based on received script by configuration management taught by Haswell for the purpose of to establish and maintain the integrity of the **components** of an application throughout the project's life cycle (Haswell column 48, lines 59-63).

10. The apparatus of claim 2, wherein the function manager further comprises at least one factory.

For the feature of claim 2 see claim 2 rejection. See Merrill's Fig. 12, it has a scripting engine, which implies it has a

	function to load the script engine before using it. See Merrill paragraph 134, "Executable program files are **loaded** by the operating system as a separately executing process." Therefore, it has the function of '**Load Script Engine**', as specified in Figure 3 in current application.
11. The apparatus of claim 2, wherein the function manager further comprises commands.	For the feature of claim 2 see claim 2 rejection. See claim 1 (b) rejection for 'commands'.
12. The apparatus of claim 2, wherein the function manager and the interface manager further comprise components.	For the feature of claim 2 see claim 2 rejection. See claim 9 rejection.
14. The apparatus of claim 13, wherein the scripting engine further comprises Jscript.	For the feature of claim 13 see claim 13 rejection. 'Jscript' is an implementation detail, a different script language can implement the same functions has cited in the claim. An example is given in Haswell, column 47, lines 20-21, "Method Description Int generate(String) Create HTML to call Javascript function ("String value") when the action is triggered. Int **JScript**(String) Create HTML to call Javascript function ("String value") when the action is triggered."

13. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 2002/0008703 by John Wickens Lamb Merrill et al. (hereinafter "Merrill"), in view

of US Patent No. 6,701,514 by John Jeffrey Haswell (hereinafter "Haswell"),

further in view of U.S. Patent No. 6,385,652 by Kenneth R. Brown et al.

(hereinafter "Brown").

CLAIM	Merrill /Haswell / Brown
7. The apparatus of claim 2, wherein device functionality further comprises scriptable shell control for replacement of a shell of an operating system.	For the feature of claim 2 see claim 2 rejection. Haswell and Merrill teaches all aspects of claim 7, but he does not mention 'replacement of a shell' specifically, however, Brown teaches it in an analogous prior art. In Brown column 9, lines 23-25, "All application forms are implemented as Java applets and/or HTML **components**, and the navigation shell design specifies that they are presented as panels and uniform resource locators (URLs). The **shell is customizable** (e.g., selection of solution packages, dynamic re-sizing of the form area) and data driven, and provides an interface for new forms and applications to be inserted." It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to supplement Haswell and Merrill's disclosure of the entering script and base on script to generate user interface by customizing shells taught by Brow for the purpose of providing personalization and customization of services and features (Brown column 3, lines 53-55).

14. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 2002/0008703 by John Wickens Lamb Merrill et al. (hereinafter "Merrill"), in view of US Patent No. 6,701,514 by John Jeffrey Haswell (hereinafter "Haswell"), further in view of U.S. Patent No. 5,878,258 by Anthony C. Pizi et al. (hereinafter "Pizi").

CLAIM	Merrill / Haswell / Pizi
8. The apparatus of claim 2, wherein the function means further comprises a shell manager.	For the feature of claim 2 see claim 2 rejection. Haswell and Merrill teach all aspects of claim 8, but he does not mention 'shell manager' specifically, however, Pizi teaches it in an analogous prior art. In Pizi, column 2, lines 40-43, "As system requirements grow in sophistication, the need for a more powerful and versatile **shell manager** has emerged as the primary bottleneck in workstation design." It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to supplement Haswell and Merrill's disclosure of the entering script and base on script to generate user interface by utilizing a shell manager taught by Pizi for the purpose of handling sophisticated system requirements (Pizi column 2, lines 40-41).

15. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 2002/0008703 by John Wickens Lamb Merrill et al. (hereinafter "Merrill"), in

view of U.S. Patent No. 6,493,871 by Thomas D. McGuire et al. (hereinafter "McGuire").

CLAIM	Merrill / McGuire
17. A method for producing user interfaces and device functionality for processor-based devices having an embedded operating system and programming framework, comprising: (a) launching a shell startup program; (b) creating by the shell startup program an instance of a script manager; (c) creating by script manager an instance of a script site interface; (d) loading a script engine associated with the script site interface; (e) executing a master script file by the script engine; (f) interfacing by the master script to permit processing of external functions; (g) creating a script control by script manager for receiving instructions from the script engine and adding and removing named objects based on information in the master script file; and (h) creating named object manger by script manager for exposing named objects to the script engine and managing the existence of a generic sink.	For items (a), see claim 10 rejection, the executable programs can be shell startup program. For (b), see Merrill's FIG. 12, in Merrill's disclosure the 'script engine' works as a script manager. For (c) and (d), the script engine (*script manager*) maintains the connection(s) to the script site interface site(s) (*502, 504*). For (f) and (g), Merrill's **Agent Control** controls each object, it works like the 'master script file' as specified in the current application. See Merrill paragraph 419, "In the current implementation, the script engine 506 accesses the animation server through an OLE control called the agent control 508. The agent control 508 is a dynamic link library that can be loaded into the process space of programs that qualify as OLE containers. The script engine 506 is an OLE container and interacts with the OLE control 508 embedded in it via the standard OLE container-control interfaces. In turn, the agent control communicates with the animation server through the server's API." The animation server adds or removes named objects base upon the agent control's direction. For (h), Merrill's OLE container works as the 'generic sink' specified in the current application, it

	controls each of the object, see Merrill's paragraph 419, "The script engine 506 is an OLE container and interacts with the OLE control 508 embedded in it via the standard OLE container-control interfaces." For (e), Merrill teaches all aspects of claim 17, but he does not mention 'master script file' specifically, however, McGuire teaches it in an analogous prior art. In McGuire's claim 24, "the script component includes a **master script file** containing **setup information** and at least one **component script** for updating a component of the software product." It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to supplement Merrill's disclosure of the script manager by providing a master script file taught by McGuire, for the purpose of maintaining object set up information (McGuire claim 24).
18. The method of claim 17, further comprising the step of passing information from the script engine to script manager by the script site interface.	For the feature of claim 17 see claim 17 rejection. See claim 17 (c) and (d) rejection.
19. The method of claim 17, further comprising the step of specifying creation of a shell control object by script control.	For the feature of claim 17 see claim 17 rejection. See 'Agent Control' in claim 17 (f) and (g) rejection.
20. The method of claim 17, further	For the feature of claim 17 see claim 17

comprising the step of creating and using an EDL script file consisting of the substeps of:

(a) selecting components to be used in the script;

(b) selecting the commands to be used in the script;

(c) compiling the script via an EDL compiler to produce a binary file;

(d) downloading the binary file for testing or incorporating the binary file into an operating system image.

rejection. In Merrill's paragraph 418, " The type of scripting engine depends on the **script language**. Some examples of script engines include an instance of the Microsoft **Visual Basic** (*one kind of **EDL***, Easy-to-use Script Language), run-time environment, or a web browser like Microsoft Internet Explorer." For item (a), see Merrill paragraph 136, "the services are available to client programs as application programming interface (API) functions provided in the COM library, which is part of a **component** of the Windows7 operating system in a file named "OLE32.DLL". For item (b), in paragraph 5, "these languages use textual **command** scripts to run procedures based on underlying controls." For items (c) and (d), see paragraph 340, " the browser renders the Web page, it also encounters the script. For Visual Basic Script, the browser loads a Visual Basic Script runtime interpreter locally to translate the Visual Basic script on-the-fly and run the code. If the browser supports other scripting languages, it loads the appropriate interpreter based on the script language identified in the document. When the browser encounters script code, it loads an appropriate interpreter for the script language, and this interpreter then translates the code. The script code executes via calls from the interpreter in response to references to the

character control interface, which in this specific implementation is the OLE control interface described in detail above. In the specific case of Visual Basic Script, for example, the browser loads an interpreter in the process space of the browser. To execute the script code, the browser uses the interpreter to translate the code (*binary code*) and then accesses the OLE control interface in response to references to the control interface in the script code."

Conclusion

The following summarizes the status of the claims:

35 USC § 102 claim rejection: 13, 15, 16

35 USC § 103 claim rejection: 1-12, 14, 17-20

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Ching Chow whose telephone number is 571-272-3693. The examiner can normally be reached on 7:00am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on 571-272-3695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chih-Ching Chow
Examiner
Art Unit 2122

CC

ANTONY NGUYEN-BA
PRIMARY EXAMINER